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10/587,689	07/27/2006	Alfred Freiburger	FREIBERGER - 1 PCT	8394
25889	7590	04/28/2009		
COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576			EXAMINER BERTHEAUD, PETER JOHN	
			ART UNIT	PAPER NUMBER
			3746	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/587,689	Applicant(s) FREIBERGER, ALFRED	
	Examiner PETER J. BERTHEAUD	Art Unit 3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office action is in response to amendments filed 1/21/2009. It should be noted that claims 1-8 have been cancelled and claims 9-16 have been added.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because it exceeds 150 words.

Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 9-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 9 recites the limitation "the suction pipe" in line 22. There is insufficient antecedent basis for this limitation in the claim.

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6. In claim 9, lines 23-24, the phrase “directed into the compressor housing, which suction pipe extends into the interior of the compressor housing” is rendered indefinite. The Examiner believes there to be a grammatical or typographical error involving the term “which”. Appropriate correction is required.

7. In claim 10, lines 2-4, the phrase “wherein the suction pipe is guided shortly to a point shortly before the intake port in the outer tube” is rendered indefinite for the repeated use of “shortly”. Furthermore, the term “shortly” in claim 10 is a relative term which renders the claim indefinite. The term “shortly” is not defined by the claim and the specification does not provide a standard for ascertaining the requisite degree.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Nelson 4,370,104.

Nelson discloses a hermetically encapsulated refrigerant compressor, comprising: a hermetically sealed compressor housing 11; a piston-cylinder unit (see piston 47) disposed in an interior of the housing, said piston-cylinder unit compressing a refrigerant and comprising a suction valve with an intake port arranged in a valve plate 42 of the suction valve; a suction muffler 65 through which the refrigerant flows to the

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suction valve of the piston-cylinder unit, said suction muffler 65 being disposed on the cylinder head of the piston-cylinder unit and comprising: a filling volume (the volume above the end of projection 86 within 65; see Fig. 3); an inlet cross section (the cross section taken at a horizontal line that runs across the top of projection 86 within 65; see Fig. 3) through which refrigerant flows into the suction muffler 65; and a compensating volume (the volume between the tubular projection 86 and the wall of the muffler, the wall specifically consisting of the bottom of 71 and end cap 69) in connection with the suction muffler 65 and the interior of the compressor housing and in which the refrigerant oscillates, wherein the inlet cross section is simultaneously a connecting port between the compensating volume and the filling volume, and the compensating volume is formed by an outer tube (71) which tightly encloses the intake port or the inlet cross section and encloses the refrigerant suction pipe (96, 88, 86) at least along a section and is directed into the compressor housing, which suction pipe (96, 88, 86) extends into the interior of the compressor housing 11, and wherein the compensating volume and filling volume are arranged so that refrigerant from the suction pipe flows into the compensating volume by passing through the filling volume (the refrigerant must flow out of the projection 86 before it can flow into the volume created by cap 69); wherein the suction pipe (96, 88, 86) is guided shortly to a point shortly before the intake port (see 75) in the outer tube 71.

In addition, while features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function, because apparatus claims cover what a device

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is, not what a device does (Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990)). Thus, if a prior art structure is capable of performing the intended use as recited in the preamble, or elsewhere in a claim, then it meets the claim.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson 4,370,104.

In reference to claim 11, Nelson discloses the claimed invention except for the outer tube and the suction muffler being provided with an integral configuration. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the outer tube 71 and end cap 69 integral, creating the suction muffler, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art (*In re Larson*, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965) see MPEP 21440.4 V. B - Making Integral).

In reference to claims 12-16, Nelson discloses the general conditions of the claimed invention except for the specific disclosure of:

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the compensating volume being 0.5 to 1.2 times the working volume of the piston of the piston-cylinder unit,

the compensating volume being at least half the working volume of the piston of the piston-cylinder unit,

a smallest flow cross section in the compensating volume having a cross-sectional surface area which corresponds to 1/4 to 3/4 of a cross-sectional surface area of the intake port,

a cross-sectional surface area of the compensating volume being at most 1.5 times the piston head surface area of the piston of the piston-cylinder unit,

or the compensating volume having a circular cross section and a ratio of a length of the compensating volume to its diameter being higher than 10.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the muffler to have a compensating volume with these various parameters, since the claimed values are merely optimum or workable ranges. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art (*In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955) see MPEP 2144.05 II - Optimization of Ranges).

Response to Arguments

12. Applicant's arguments with respect to claims 9-16 have been considered but are moot in view of the new interpretation of the Nelson reference. Please see the above rejections for details.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PETER J. BERTHEAUD whose telephone number is (571)272-3476. The examiner can normally be reached on M-F 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on (571) 272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devon C Kramer/
Supervisory Patent Examiner, Art
Unit 3746

PJB
/Peter J Bertheaud/
Examiner, Art Unit 3746